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10/757,651	01/14/2004	Achim Kraiss	13906-165001 / 2003P00822	3935
32864	7590	09/02/2009	EXAMINER	
FISH & RICHARDSON, P.C. PO BOX 1022 MINNEAPOLIS, MN 55440-1022			SILVER, DAVID	
			ART UNIT	PAPER NUMBER
			2128	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

Office Action Summary	Application No. 10/757,651	Applicant(s) KRAISS, ACHIM	
	Examiner DAVID SILVER	Art Unit 2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5,6,11,12 and 32-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5,6,11,12 and 32-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. Claims 1, 3, 5-6, 11-12, 32-39 are currently pending in Instant Application.
2. The Instant Application is not currently in condition for allowance.

Response to Arguments

Response: 35 U.S.C. § 102/103

3. Examiner Response:

- 3.1 Applicants' arguments are moot in view of new ground of rejection, necessitated by amendment.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1, 3, 5-6, 11, and 32-37, 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Fujiwara (**US 20020091875**), in view of Davis (**US 20040034570**).

Fujiwara discloses: 1. (Currently Amended) A computer-implemented method for providing predictive information to a human user during the course of conducting an interactive session with a customer, during which interactive session the human user uses prediction results to an application computing system comprising one or more software applications that run in a computing environment the application computing system connected to communicate with a prediction computing engine, the computer-implemented method comprising:

during the course of the interactive session with the customer, the application computing system sending a first electronic request to the prediction computing engine to perform a first prediction determination of a probability that the customer will take a predefined action, the first electronic request

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including a first input value set **(0132; 0178)**;

in response to the first electronic request, the prediction computing engine using the first input value set to perform the first prediction determination, electronically storing first state information generated as part of the first prediction determination, and providing to the application computing system for use by the human user a first prediction result of the first prediction determination **(0178; the customer disclosed in the reference is the user, and is inherently a human. The human user in the claimed invention can be the identical entity as the customer.);**

at a later point in time during the interactive session with the customer when additional information about the customer becomes available, the application computing system sending a second request to the prediction computing engine to perform a second prediction determination of a probability that the customer will take the predefined action, the second request including receiving a third electronic communication that includes a second input value set comprising at least information derived; and from the application computing system **(0178)**;

in response to the second request, the prediction computing engine performing the second prediction determination using both of the stored first state information generated as part of the first prediction determination and the second input value set derived from the additional information about the customer that became available, the first state information *being used to avoid calculations being performed in the second prediction determination that would duplicate calculations that were already performed in the first prediction determination, and providing to the application computing system for use by the human user a second prediction result of the second prediction determination (0178;* **portion in italicized emphasis is not given patentable weight as it does not necessitate function and is drawn merely to non-functional descriptive matter).**

Fujiwara however does not expressly teach "a third electronic communication that includes a second input value set comprising at least information derived from the additional information about the customer that became available at the application computing system after the sending of the first request", and "the second input value set derived from the additional information about the customer

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that became available at the application system after the sending of the first response”.

Davis however teaches said features **(para 22: " identify transaction patterns of a set of consumers in one or more earlier first time periods that correlate to purchases by those consumers of one or more products and services within specified product and service classes in one or more later second time periods after the one or more earlier first time periods. "; para 50; incentives being offered during the interactive pot of sail session discussed in para 46).**

In view of the KSR v. Teleflex Supreme Court ruling, it is asserted that one of ordinary skill in the art would have recognized that applying the known technique would have yielded predictable results. Furthermore, one of ordinary skill in the art would have recognized that the results of the combination were predictable. It is well known that more information gives more accurate prediction models. Receiving such information and using it in transactions is also beneficial to the modeling and therefore the results of the model (proper incentives). Since customers tend to make multiple purchases, using data from each purchase / transaction help give such additional data to make a more accurate model. Since customers make multiple transactions, they happen over a time span. Therefore, it would have been obvious that whenever a new piece of information from a transaction is recorded, that information is used to update the prediction model as claimed and as disclosed.

See MPEP 2145 [R-6], X, B, " [A] person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely that product [was] not of innovation but of ordinary skill and common sense. In that instance the fact that a combination was obvious to try might show that it was obvious under § 103." KSR International Co. v. Teleflex Inc., 550 U.S. ___, ___, 82 USPQ2d 1385, 1397 (2007).

Fujiwara discloses: 3. (Currently Amended) The computer-implemented method of claim 1, wherein the second input value set includes both the first input value set and an additional set of input values, and wherein the method comprises using a decision tree along with the stored state information and the additional set of input values to compute the second prediction **(0178)**.

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Fujiwara discloses: 5. (Previously Presented) The computer-implemented method of claim 1, wherein the first input value set includes at least two input values **(0178; Fig 16A; Fig 2)**.

Fujiwara discloses: 6. (Previously Presented) The computer-implemented method of claim 1, wherein the second input value set includes at least two input values **(0178; Fig 16A; Fig 2)**.

Fujiwara discloses: 11. (Currently Amended) The computer-implemented method of claim 1, wherein the first state information includes intermediate probability information **(Fig 15 wherein the model specified in S24 is further refined and is therefore intermediate information; Fig 52; para 178 - "response rate is again predicted")**.

Fujiwara discloses: 32. (New) The computer-implemented method of claim 1, wherein the second input value set is provided to the application computing system by the human user as a result of interaction by the human user with the customer.

As per claims 33-37, 39, note the rejection of claims 1, 3, 5, 6 and 11 above. The Instant Claims recite substantially same limitations as the above-rejected claims and are therefore rejected under same prior-art teachings.

5. Claims 12 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujiwara **(US 20020091875)** in view of Davis **(US 20040034570)**, as applied to claim 1 above, and further in view of Tamayo **(US 20020083067)**.

Regarding claim 12, Fujiwara fully discloses the parent claims' limitations. Fujiwara however does not expressly disclose that "the first and second prediction results each specify a probability of customer churn."

Tamayo however discloses an analogous prediction computing engine having the said feature **(para 241)**.

In view of the KSR v. Teleflex Supreme Court ruling, it is asserted that one of ordinary skill in the art would have recognized that applying the known technique would have yielded predictable results.

Furthermore, one of ordinary skill in the art would have recognized that the results of the combination were predictable. Specifically, the use of prediction models to predict customer churn is well known and

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the result of the combination of using a decision tree and prediction models to predict customer churn would have been predictable.

See MPEP 2145 [R-6], X, B, "[A] person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely that product [was] not of innovation but of ordinary skill and common sense. In that instance the fact that a combination was obvious to try might show that it was obvious under § 103." KSR International Co. v. Teleflex Inc., 550 U.S. ___, ___, 82 USPQ2d 1385, 1397 (2007).

As per claim 38, note the rejection of claim 12 above. The Instant Claim recites substantially same limitations as the above-rejected claim and is therefore rejected under same prior-art teachings.

Support for Amendments and Newly Added Claims

Applicants are respectfully requested, in the event of an amendment to claims or submission of new claims, that such claims and their limitations be directly mapped to the specification, which provides support for the subject matter. This will assist in expediting compact prosecution. MPEP 714.02 recites: "Applicant should also specifically point out the support for any amendments made to the disclosure. See MPEP § 2163.06. An amendment which does not comply with the provisions of 37 CFR 1.121(b), (c), (d), and (h) may be held not fully responsive. See MPEP § 714." **Amendments not pointing to specific support in the disclosure may be deemed as not complying with provisions of 37 C.F.R.**

1.131(b), (c), (d), and (h) and therefore held not fully responsive. Generic statements such as "Applicants believe no new matter has been introduced" may be deemed insufficient.

Requests for Interview

6. In accordance with 37 CFR 1.133(a)(3), requests for interview must be made in advance.

Interview requests are to be made by telephone (571-272-8634) call or FAX (571-273-8634).

Applicants must provide a detailed agenda as to what will be discussed (generic statement such as "discuss §102 rejection" or "discuss rejections of claims 1-3" may be denied interview).

The detail agenda along with any proposed amendments is to be written on a PTOL-413A or a custom form and should be faxed (or emailed, subject to MPEP 713.01.I / MPEP 502.03) to the Examiner at least

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3 days prior to the scheduled interview.

7. Interview requests submitted within amendments may be denied because the Examiner was not notified, in advance, of the Applicant Initiated Interview Request and due to time constraints may not be able to review the interview request to prior to the mailing of the next Office Action.

Conclusion

8. All claims are rejected.
9. The Instant Application is not currently in condition for allowance.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Silver whose telephone number is (571) 272-8634. The examiner can normally be reached on Monday thru Friday, 10am to 6:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached on 571-272-2279. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through

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Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Kamini S Shah/

Supervisory Patent Examiner, Art Unit 2128

/ DS /

David Silver, Patent Examiner
Art Unit 2128